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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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David Reed

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04/13/2006

BLAKELY SOKOLOFF TAYLOR & ZAFMAN

12400 WILSHIRE BOULEVARD

SEVENTH FLOOR

LOS ANGELES, CA 90025-1030

EXAMINER

NEGRON, ISMAEL

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/615,433	Applicant(s) REED, DAVID	
	Examiner Ismael Negron	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-9, 11-14, 16-26, 30-33, 35-38, 40-47 and 52-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 8, 52 and 53 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 9, 11-14, 16-21, 23-26, 31-33, 35, 38, 40-47, 54, 55, 57, 59, 62 and 63 is/are rejected.
- 7) ☒ Claim(s) 9, 17-19, 22, 30, 36, 37, 56, 58, 60 and 61 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Response to Amendment

2. Applicant's amendment filed on February 16, 2006 has been entered. Claims 1, 6-9, 11-14, 19, 21, 22, 30, 31, 35, 40-43 and 46 have been amended. Claims 4, 10, 15, 39 and 48-51 have been cancelled. Claims 52-63 have been added. Claims 1-3, 6-9, 11-14, 16-26, 30-33, 35-38, 40-47 and 52-63 are still pending in this application, with claims 1, 7, 8, 21 and 31 being independent.

Claim Objections

3. Claim 9 is objected to because of the following informalities: it recites the limitation "*the first circuit board*" in line 3. There is insufficient antecedent basis for this limitation in the claim.

The cited lack of antecedent instances do not amount to indefinitiveness under 35 U.S.C. 112, second paragraph, since is readily apparent that the claims are referring back to the previously recited "circuit board" (Claim 1, line 2). However, appropriate correction is required to place the claims in proper form for allowance.

4. Claim 9 is objected to because of the following informalities: it recites the limitation "*the first opening*" in line 3. There is insufficient antecedent basis for this limitation in the claim.

The cited lack of antecedent instances do not amount to indefinitiveness under 35 U.S.C. 112, second paragraph, since is readily apparent that the claims are referring back to the previously recited "opening" (Claim 1, line 18). However, appropriate correction is required to place the claims in proper form for allowance.

5. Claim 17 is objected to because of the following informalities: it recites the limitation "*the first circuit board*" in lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim.

The cited lack of antecedent instances do not amount to indefinitiveness under 35 U.S.C. 112, second paragraph, since is readily apparent that the claims are referring back to the previously recited "circuit board" (Claim 1, line 2). However, appropriate correction is required to place the claims in proper form for allowance.

6. Claim 18 is objected to because of the following informalities: it recites the limitation "*the generated light*" in line 4. There is insufficient antecedent basis for this limitation in the claim.

The cited lack of antecedent instances do not amount to indefiniteness under 35 U.S.C. 112, second paragraph, since it is readily apparent that the claims are referring back to the previously recited "photons" (Claim 17, line 7). However, appropriate correction is required to place the claims in proper form for allowance.

7. Claim 19 is objected to because it uses the phrase "the light further includes", however, two different "lights" are previously defined: the claimed device itself and the light produced by the LED.

The cited lack of antecedent instances do not amount to indefiniteness under 35 U.S.C. 112, second paragraph, since it is readily apparent that the claims are referring to the whole of the claimed device. However, appropriate correction is required to place the claims in proper form for allowance.

The Examiner respectfully suggests amending claims 1-3, 6-9, 11-14, 16-26, 30-33, 35-38, 40-47 and 52-63 to recite "a light fixture", "a lighting device", "a lighting apparatus", or the like.

8. It is noted that the claims refer to the output of the LED using the hyper technical term "photons" as well as the more generally used term "light". The applicant is strongly advised to select a single preferred term (e.g. light) and to use such single term consistently throughout the claims.

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9. Applicant is further advised that this action only exemplifies the objections to the claims, applicant's cooperation is requested in correcting all the occurrences of the cited, or any other errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 is indefinite as it is not clear if the claimed LEDs are required to generate primary colors (as implied in line 8), or just a plurality of different colors (as defined in line 5).

The Examiner respectfully suggest amending line 8 to read: "mixture of primary colors generated by the"

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

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obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-3, 6, 9, 11-14, 16-21, 24-26, 55, 57 and 59 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of REED (U.S. Pat. 6,634,779).

12. REED teaches a lighting device having:

- a circuit board (as recited in Claim 1), patented Claim 1, line 3;
- the circuit board including at least one LED (as recited in Claim 1), patented Claim 5;
- the LED being for generating photons (as recited in Claim 1), patented Claim 1, line 4;
- the LED having an optical axis (as recited in Claim 1), inherent;
- an acrylic rod (as recited in Claim 1), patented Claim 1, line 2;

- **the rod having a first end (as recited in Claim 1), patented Claim 1, line 2;**
- **the rod having a second end (as recited in Claim 1), patented Claim 1, line 2;**
- **the rod having a central optical axis (as recited in Claim 1), inherent;**
- **the rod including a reflective strip (as recited in Claim 1), patented Claim 2, line 2;**
- **the reflective strip being disposed along a substantial length of the rod (as recited in Claim 1), patented Claim 2, lines 2 and 3;**
- **the reflective strip being for reflecting photons outwards through the rod towards a direction (as recited in Claim 1), patented Claim 2, line 3;**
- **a housing (as recited in Claim 1), patented Claim 1, line 5;**
- **the housing having an opening (as recited in Claim 1), patented Claim 1, line 5;**
- **the first end of the rod being inserted through the opening (as recited in Claim 1), patented Claim 1, lines 5 and 6;**
- **the housing being for housing the circuit board (as recited in Claim 1), patented Claim 1, lines 6 and 7;**
- **the housing being to align the at least one LED with the opening and the first end of the rod such that the optical axis**

of the at least one LED is substantially parallel with the central optical axis of the rod (as recited in Claim 1), patented Claim 1, lines 7-10;

- **the rod being cylindrical (as recited in claims 3 and 11-13), patented Claim 3, line 3;**
- **the at least one LED emitting incoherent light into the rod (as recited in Claim 6), inherent;**
- **a reflector (as recited in Claim 9), patented Claim 1, line 11;**
- **the reflector being coupled to the circuit board (as recited in Claim 9), patented Claim 1, line 11;**
- **a first end of the reflector being disposed around the at least one LED (as recited in Claim 9), patented Claim 1, lines 11 and 12;**
- **a second end of the reflector being aligned with the opening (as recited in Claim 9), patented Claim 1, lines 13 and 14;**
- **the second end of the reflector receiving the first end of the rod (as recited in Claim 9), patented Claim 1, lines 14 and 15;**
- **the reflector being for reflecting photons into the rod (as recited in Claim 9), patented Claim 1, lines 15 and 16;**
- **the rod being a circular cylinder (as recited in claims 11 and 12), patented Claim 3, line 3;**

- **the reflective strip encompassing a portion of the circumference of the rod of 90 degrees (as recited in Claim 12), patented Claim 4;**
- **the photons are coupled to the rod without using a fragile glass bulb or filament (as recited in Claim 14), inherent, as LED do not include a fragile glass bulb or filament;**
- **the device being a light fixture (as recited in Claim 16), patented Claim 1;**
- **the light fixture being for mounting to a surface to illuminate an area (as recited in Claim 16), inherent;**
- **an electro-optical controller (as recited in Claim 17), patented Claim 6, line 2;**
- **the controller being coupled to the circuit board (as recited in Claim 17), patented Claim 6, lines 2 and 3;**
- **the controller being for controlling the at least one LED (as recited in Claim 17), patented Claim 6, line 3;**
- **an ON/OFF switch (as recited in Claim 17), patented Claim 6, line 4;**
- **the ON/OFF switch being for switching the generation of photons by the at least one LED (as recited in Claim 17), patented Claim 6, lines 4 and 5;**

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- **an intensity switch (as recited in Claim 18), patented Claim 7, line 2;**
- **the intensity switch being for varying the brightness of the generated photons (as recited in Claim 18), patented Claim 7, lines 2 and 3;**
- **the at least one LED being a plurality of LEDs (as recited in Claim 19), patented Claim 8;**
- **each one of the plurality of LEDs generating different colors of light (as recited in Claim 19), patented Claim 8;**
- **a color selection switch (as recited in Claim 19), patented Claim 8, line 2;**
- **the color selection switch being for selectively choosing a mixture of colors generated by the LEDs to vary the color of the light emitted by the device (as recited in Claim 19), patented Claim 8, lines 2-4;**
- **a transformer (as recited in Claim 20), patented Claim 9, line 2;**
- **the transformer being for transforming AC power to a safe efficient power (as recited in Claim 20), patented Claim 9, lines 2 and 3; and**
- **the safe efficient power being for powering the LEDs in an efficient manner (as recited in Claim 20), patented Claim 9, lines 3 and 4.**

13. REED discloses all the limitations of the claims, except:

- the rod being rotatable within the opening (as recited in Claim 1);
- the rod being clear (as recited in Claim 2);
- the reflective strip encompassing a portion of the circumference of the rod over a range of 45 degrees to 180 degrees (as recited in Claim 11); and
- the reflective strip encompassing a portion of the circumference of the rod of 45 degrees (as recited in Claim 13).

14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the rod of REED to rotate about its central axis (as recited in Claim 1) to be able to orient the reflector to redirect the reflected light in a desired direction, since the Examiner takes Official Notice that rotating reflectors to redirect the reflected light in a desired direction is old and well known in the art.

Evidence of such old and well known in the art status can be found in Section 35 of the instant Office Action. In addition, the applicant is advised that it has been held that the provision of adjustability, where needed, involves only ordinary skill in the art. *In re Stevens*, 101 USPQ (CCPA 1954). Providing for rotation of the rod would have been obvious for adjusting the direction of the light reflected by the reflector towards a desired/required target of illumination.

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15. Regarding the patented rod being clear (as recited in Claim 2), one of ordinary skill in the art would have recognized the patented rod of REED as being necessarily a clear rod to maximize the amount of light transmitted from the LED through the rod.

16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to the reflective strip encompassing a portion of the circumference of the rod over a range of 45 degrees to 180 degrees (as recited in Claim 11) or 45 degrees (as recited in Claim 13), since it has been held by the courts that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device, and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. *In Gardner v. TEC Systems, Inc.*, 220 USPQ 777 (Fed. Cir. 1984). In this case selecting a given angular extension for the reflecting strip would have flown naturally to one of ordinary skill in the art as necessitated by the specific requirements of a given application, with broader angular extension providing a more localized illumination effect.

17. Method claims 21, 23-26, 55, 57 and 59 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of REED (U.S. Pat. 6,634,779).

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18. REED discloses, or suggests all the structural limitations of the claims (as detailed in sections 10-15, above), except specifically claiming a method of illumination using the patented device.

19. One of ordinary skill in the art would have recognized that the patented structure of REED inherently disclosed a method of using such device for producing illumination.

20. Claims 31-33, 35, 38, 40-47 and 62 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of REED (U.S. Pat. 6,634,779) in view of BACH et al. (U.S. Pat. 6,135,621).

21. REED teaches a lighting device having:

- **a first circuit board (as recited in Claim 31),** patented Claim 1, line 3;
- **the first circuit board including at least one LED (as recited in Claim 31),** patented Claim 5;
- **the LED being for generating photons (as recited in Claim 31),** patented Claim 1, line 4;
- **the LED having an optical axis (as recited in Claim 31),** inherent;
- **an acrylic rod (as recited in Claim 31),** patented Claim 1, line 2;

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- **the rod having a first end (as recited in Claim 31), patented Claim 1, line 2;**
- **the rod having a second end (as recited in Claim 31), patented Claim 1, line 2;**
- **the rod having a central optical axis (as recited in Claim 31), inherent;**
- **the rod including a reflective strip (as recited in Claim 31), patented Claim 2, line 2;**
- **the reflective strip being disposed along a substantial length of the rod (as recited in Claim 31), patented Claim 2, lines 2 and 3;**
- **the reflective strip being for reflecting photons outwards through the rod towards a direction (as recited in Claim 31), patented Claim 2, line 3;**
- **a first housing (as recited in Claim 31), patented Claim 1, line 5;**
- **the first housing having a first opening (as recited in Claim 31), patented Claim 1, line 5;**
- **the first end of the rod being inserted through the first opening (as recited in Claim 31), patented Claim 1, lines 5 and 6;**
- **the first housing being for housing the first circuit board (as recited in Claim 31), patented Claim 1, lines 6 and 7;**

- **the first housing being to align the at least one LED with the first opening and the first end of the rod such that the optical axis of the at least one LED is substantially parallel with the central optical axis of the rod (as recited in Claim 31), patented Claim 1, lines 7-10;**
- **the rod being cylindrical (as recited in claims 33 and 40-42), patented Claim 3, line 3;**
- **the at least one LED emitting incoherent light into the rod (as recited in Claim 35), inherent;**
- **a first reflector (as recited in Claim 38), patented Claim 1, line 11;**
- **the first reflector being coupled to the first circuit board (as recited in Claim 38), patented Claim 1, line 11;**
- **a first end of the first reflector being disposed around the at least one LED (as recited in Claim 38), patented Claim 1, lines 11 and 12;**
- **a second end of the first reflector being aligned with the first opening (as recited in Claim 38), patented Claim 1, lines 13 and 14;**
- **the second end of the first reflector receiving the first end of the rod (as recited in Claim 38), patented Claim 1, lines 14 and 15;**

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- **the first reflector being for reflecting photons into the rod (as recited in Claim 38), patented Claim 1, lines 15 and 16;**
- **the rod being a circular cylinder (as recited in claims 40 and 41), patented Claim 3, line 3;**
- **the reflective strip encompassing a portion of the circumference of the rod of 90 degrees (as recited in Claim 41), patented Claim 4;**
- **the photons are coupled to the rod without using a fragile glass bulb or filament (as recited in Claim 43), inherent, as LED do not include a fragile glass bulb or filament;**
- **an electro-optical controller (as recited in Claim 44), patented Claim 6, line 2;**
- **the controller being coupled to the circuit board (as recited in Claim 44), patented Claim 6, lines 2 and 3;**
- **the controller being for controlling the at least one LED (as recited in Claim 44), patented Claim 6, line 3;**
- **an ON/OFF switch (as recited in Claim 44), patented Claim 6, line 4;**
- **the ON/OFF switch being for switching the generation of photons by the at least one LED (as recited in Claim 44), patented Claim 6, lines 4 and 5;**

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- **an intensity switch (as recited in Claim 45), patented Claim 7, line 2;**
- **the intensity switch being for varying the brightness of the generated photons (as recited in Claim 45), patented Claim 7, lines 2 and 3;**
- **the at least one LED being a plurality of LEDs (as recited in Claim 46), patented Claim 8;**
- **each one of the plurality of LEDs generating different colors of light (as recited in Claim 46), patented Claim 8;**
- **a color selection switch (as recited in Claim 46), patented Claim 8, line 2;**
- **the color selection switch being for selectively choosing a mixture of colors generated by the LEDs to vary the color of the light emitted by the device (as recited in Claim 46), patented Claim 8, lines 2-4;**
- **a transformer (as recited in Claim 47), patented Claim 9, line 2;**
- **the transformer being for transforming AC power to a safe efficient power (as recited in Claim 47), patented Claim 9, lines 2 and 3; and**
- **the safe efficient power being for powering the LEDs in an efficient manner (as recited in Claim 47), patented Claim 9, lines 3 and 4.**

22. REED discloses all the limitations of the claims, except:

- a second circuit board (as recited in Claim 31);
- the second circuit board including at least one LED (as recited in Claim 31);
- a second housing (as recited in Claim 31);
- the second housing having a second opening (as recited in Claim 31);
- the second end of the rod being inserted through the second opening (as recited in Claim 31);
- the second housing being for housing the second circuit board (as recited in Claim 31);
- the second housing being to align the at least one LED with the second opening and the second end of the rod such that the optical axis of the at least one LED is substantially parallel with the central optical axis of the rod (as recited in Claim 31);
- a second reflector (as recited in Claim 38);
- the second reflector being coupled to the second circuit board (as recited in Claim 38);
- a second end of the second reflector being disposed around the at least one LED (as recited in Claim 38);
- a second end of the second reflector being aligned with the second opening (as recited in Claim 38);

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- the second end of the second reflector receiving the second end of the rod (as recited in Claim 38);
- the second reflector being for reflecting photons into the rod (as recited in Claim 38);
- the rod being rotatable within the opening (as recited in Claim 31);
- the rod being clear (as recited in Claim 32);
- the reflective strip encompassing a portion of the circumference of the rod over a range of 45 degrees to 180 degrees (as recited in Claim 40); and
- the reflective strip encompassing a portion of the circumference of the rod of 45 degrees (as recited in Claim 42).

23. BACH et al. discloses an illumination device having:

- **a rod (as recited in Claim 31), Figure 4, reference number 12;**
- **the rod being capable of rotation (as recited in Claim 31)**
- **the rod being made of acrylic (as recited in Claim 31), column 2, lines 7-9;**
- **the rod having a first end (as recited in Claim 31), Figure 4, reference number 11;**
- **the rod having a second end (as recited in Claim 31), Figure 4, reference number 13;**
- **a first light source support (as recited in Claim 31), as seen in Figure 4;**

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- **at least one light source (as recited in Claim 31), Figure 4, reference number 14;**
- **the first light source support including the at least one light source (as recited in Claim 31), as seen in Figure 4;**
- **a first end housing (as recited in Claim 31), Figure 4, reference number 24;**
- **the first end housing having a first opening (as recited in Claim 31), as seen in Figure 4;**
- **the first end of the acrylic rod being inserted through the first opening (as recited in Claim 31), column 2, lines 31-35;**
- **the acrylic rod capable of rotation within the first end housing (as recited in Claim 31), as evidenced by Figure 4;**
- **the first end housing being used to house the first light source support (as recited in Claim 31), column 2, lines 31-35;**
- **the first end housing being used to align the light source with the first opening and the first end of the acrylic rod (as recited in Claim 31), as seen in Figure 4;**
- **a second light source support (as recited in Claim 31), as seen in Figure 4;**
- **the second light source support including the at least one light source (as recited in Claim 31), Figure 4, reference number 32;**

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- **a second end housing (as recited in Claim 31), Figure 4, reference number 24;**
- **the second end housing having a second opening (as recited in Claim 31), as seen in Figure 4;**
- **the second end of the rod being inserted through the second opening (as recited in Claim 31), column 2, lines 31-35;**
- **the rod being capable of rotation within the second end housing (as recited in Claim 31), as evidenced by Figure 4;**
- **the second end housing being used to house the second light source support (as recited in Claim 31), column 2, 31-35;**
- **the second end housing being used to align the light source with the first opening and the first end of the acrylic rod (as recited in Claim 31), as seen in Figure 4;**
- **a first reflector (as recited in Claim 38), Figure 4, reference number 18;**
- **the first reflector being coupled to the first light source support (as recited in Claim 38), column 2, lines 15-20;**
- **the first reflector being disposed around the light source at a first end (as recited in Claim 38), column 2, lines 15-20;**
- **a second end of the first reflector being aligned with the first opening (as recited in Claim 38), as seen in Figure 4; and**

the second end of the first reflector receiving the first end of the acrylic rod (as recited in Claim 38), as seen in Figure 4.

24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the rod of REED to rotate about its central axis (as recited in Claim 31) to be able to orient the reflector to redirect the reflected light in a desired direction, since the Examiner takes Official Notice that rotating reflectors to redirect the reflected light in a desired direction is old and well known in the art. Evidence of such old and well known in the art status can be found in Section 35 of the instant Office Action. In addition, the applicant is advised that it has been held that the provision of adjustability, where needed, involves only ordinary skill in the art. *In re Stevens*, 101 USPQ (CCPA 1954). Providing for rotation of the rod would have been obvious for adjusting the direction of the light reflected by the reflector towards a desired/required target of illumination.

25. Regarding the patented device including a second circuit board (as recited in Claim 31), a second housing (as recited in Claim 31) and a second reflector (as recited in Claim 38), it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a second one of the patented circuit board/housing/reflector structure at the second end of the rod, as per the teachings of BACH et al.. In addition, the applicant is advised that it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St.*

Regis Paper Co. v. Bemis Co., 193 USPQ 8. One would have been motivated to increase the level of light directed into the rod.

26. Regarding the patented rod being clear (as recited in Claim 32), one of ordinary skill in the art would have recognized the patented rod of REED as being necessarily a clear rod to maximize the amount of light transmitted from the LED through the rod.

27. It would have been obvious to one of ordinary skill in the art at the time the invention was made to the reflective strip encompassing a portion of the circumference of the rod over a range of 45 degrees to 180 degrees (as recited in Claim 40) or 45 degrees (as recited in Claim 42), since it has been held by the courts that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device, and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. *In Gardner v. TEC Systems, Inc.*, 220 USPQ 777 (Fed. Cir. 1984). In this case selecting a given angular extension for the reflecting strip would have flown naturally to one of ordinary skill in the art as necessitated by the specific requirements of a given application, with broader angular extension providing a more localized illumination effect.

28. Claim 54 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 5-8 of REED (U.S. Pat. 6,634,779) in view of STINSON (U.S. Pat. 4,992,704).

29. REED discloses, or suggests all the limitations of the claims (as detailed in sections 11-13, above), except the at least one LED being a multi-color LED for generating various colors of light (as recited in Claim 54).

30. STINSON discloses a multi-color LED for generating various colors of light (as recited in Claim 54), as seen in Figure 3 and discussed in column 3 (lines 48-53).

31. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the LED of STINSON as the light source of the patented invention of REED. One would have been motivated to enable the patented lighting device to produce a plurality of selectable colors, as per the teachings of STINSON.

32. Claim 63 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 5-8 of REED (U.S. Pat. 6,634,779) in view of BACH et al. (U.S. Pat. 6,135,621), further in view of STINSON (U.S. Pat. 4,992,704).

33. The combined teachings of REED and BACH et al. disclose individually, or suggests all the limitations of the claims (as detailed in sections 20-26, above), except

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the at least one LED being a multi-color LED for generating various colors of light (as recited in Claim 63).

34. STINSON discloses a multi-color LED for generating various colors of light (as recited in Claim 54), as seen in Figure 3 and discussed in column 3 (lines 48-53).

35. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the multi-color LED of STINSON as the light source of the patented invention of REED. One would have been motivated to enable the patented lighting device to produce a plurality of selectable colors, as per the teachings of STINSON.

Relevant Prior Art

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamashita et al. (U.S. Pat. 4,924,357), **Zarian et al.** (U.S. Pat. 5,987,199), **Crumley** (U.S. Pat. 6,065,852) and **Sugiyama et al.** (U.S. Pat. 6,169,836) disclose illumination devices including end-lit light conducting rods for emitting light along a longitudinal axis of such rods.

Sugiyama et al. (U.S. Pat. 5,982,969 and **Ueda et al.** (U.S. Pat. 5,416,608) disclose illumination devices including light conducting rods having a reflective strip formed along a substantial length of such rod, the reflective strip being for reflecting light

outwardly from the rod. The angular extension of the reflective strip is selected to obtain a desired illumination pattern.

Uchida (U.S. Pat. 4,727,289) discloses illumination devices having a plurality of LED light sources for producing different colors.

Nadler (U.S. Pat. 4,598,344) and **Bogdanovs** (U.S. Pat. 4,924,365) disclose illumination devices including elongated light sources surrounded by rotatable reflectors for adjusted the emitted light to suit a particular need.

Allowable Subject Matter

37. Claims 7, 8, 52 and 53 are allowed.

38. Claims 22, 30, 36, 37, 56, 58, 60 and 61 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

39. The following is a statement of reasons for the indication of allowable subject matter:

Applicant teaches an illumination device having an acrylic rod rotatably received at the ends by an end housing. The end housing includes a light source for injecting light into the end of the rod. The diameter or length of the acrylic rod is proportional to a desired frequency of light.

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40. No prior art was found teaching individually, or suggesting in combination, all of the features of the applicants' invention, specifically the diameter or length of the acrylic rod being proportional to a desired frequency of light, in combination with the claimed illumination device.

Response to Arguments

41. Applicant's arguments filed February 16, 2006 with respect to claims 1-3, 6-9, 11-14, 16-26, 30-33, 35-38, 40-47 and 52-63 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

42. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negron whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

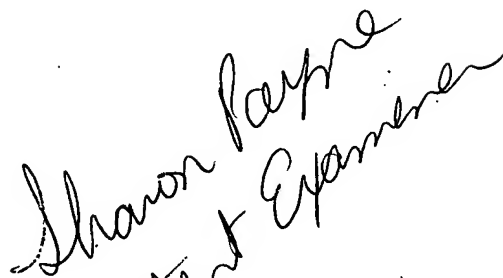
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached on (571) 272-2378. The facsimile machine number for the Art Group is (571) 273-8300.

43. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications maybe obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.


Ismael Negrón
Examiner
AU 2875


Sharon Payne
Patent Examiner